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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,063

09/21/2005

Hiroshi Kamo

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STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

ZIMMER, MARC S

ART UNIT

PAPER NUMBER

1796

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,063	<b>Applicant(s)</b> KAMO ET AL.	
	<b>Examiner</b> MARC S. ZIMMER	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 7 and 9-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/17/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 8, and 13-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Kamo, JP 2002241601 for the reasons outlined previously.

Claims 1, 8, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kohn, U.S. Patent # 4,910,082 for the reasons outlined previously.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamo, JP 2002241601 for the reasons outlined previously.

Claims 1-2, 5-6, 8, 13-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al., JP 3-126538 for the reasons outlined previously.

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### ***Response to Arguments***

The Examiner will address Applicants' arguments individually and, in doing so, will re-state the argument and follow that argument with the Examiner's own position.

Sheets used in printed circuit boards per se hardly possess the characteristics for a "mold releasing film for printed circuit board production." Therefore, the present application is distinct from the disclosure of Kamo.... However, Kamo fails to teach a mold releasing film, as is disclosed by the present application. Since sheets used in printed circuit boards per se do not possess the characteristics for a "mold-releasing film for printed circuit board production," Kamo does not teach or suggest the present application.

The Examiner has essentially taken the position that, insofar as the prior art sheet and the claimed film are similarly constituted, the prior art sheet would inherently possess mold releasing properties. Applicant does not identify those differences between the claimed film and prior art that would leave the sheet devoid of this attribute. Further, it appears that Applicant is indicating that their "film" is somehow different from a "sheet" without precisely delineating what are those differences, e.g. thickness or other. In arguendo, paragraph [0038] states that the product obtained from the PPE blend may aptly be characterized as a film in some instances.

The film of Kohn is produced by a method other than the melt molding method, so that it undergoes crystallization because of the use of a solvent. That is, the crystallization proceeds in the course of casting/polymer film formation after the filtering. Thus, the film is not substantially an "amorphous" molded article, as in the present application, and hence, is inferior in thermal shrinkage as is explained in the specification. Thus, the invention of Kohn is very distinct from the present application in this respect.

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Neither of these points are of any consequence to the patentability of the claim in the Examiner's estimation because the claimed film is not characterized as being either amorphous or as exhibiting certain shrinkage behaviors. Further, crystalline character is not ascribed to the film taught by Kohn. Moreover, it appears that Applicant is making assumptions concerning the crystallinity of Kohn's film based on the disclosed method of formation without furnishing any proof that this condition is necessarily true.

Thus, the ultrathin polyphenylene oxide film of Kohn is about 0.04  $\mu\text{m}$  or less, which is much thinner than the thickness of the mold-releasing film of the present application, which is about 50-300  $\mu\text{m}$  for the multilayer film and about 3-100  $\mu\text{m}$  for the monolayer film (see lines 12-20 of page 33 of the specification). That is, the ultrathin film of Kohn is purposely made ultrathin so that controlled release of drugs is possible, i.e., so that molecules may pass through the ultrathin film. In contrast, the multilayer film of the present application is 1250 to 7500 times thicker than the film of Kohn, and the monolayer film of the present application is about 75 to 2500 times thicker than the film of Kohn, so that the film of the present application provides a stronger film for different purposes (see process chart above). Thus, the ultrathin film of Kohn is clearly not as strong as the multi-layer mold-releasing film of the present application due to the ultrathin property.

As before, Applicant is relying on differences that are not claimed. Furthermore, if it is Applicant's position that the film disclosed by Kohn is incapable of fulfilling the role of a mold release film due to its thickness, the presentation of empirical data to support this assertion would be necessary.

It is respectfully submitted that Takada teaches a resin sheet that comprises a resin varnish, in which a thermoplastic resin, triaryl isocyanurate, a flame retarder, a reaction initiator and a solvent are added to polyphenylene oxide and fillers (if necessary), and the resin sheet is attached to a release sheet of a plastic film such as polyethylene terephthalate film, polybutylene terephthalate film, polyimide film, polyphenylene sulfide film, fluoreoresin film, and cellulose triacetate film, for example (see page 4 of the translation).

It appears that the Examiner may be confused as to the composition of the polyphenylene oxide on the release sheet - he argues that in accordance with the Application

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example (see translation, page 5, which recites that the resin varnish consists of 45 parts of polyphenylene oxide), "the Examples summarize compositions for which the polyphenylene oxide weight contribution is less than 50%" (see Office Action, page 5). However, the resin varnish is not part of the release sheet. In the present application, the mold-releasing film has a resin layer containing a polyphenylene ether-based resin in an amount of 50 wt% or more.

The Examiner understands completely the nature of Takada's invention. The claimed film embraces those having multiple layers of which a polyphenylene oxide-based layer is one. This is precisely the orientation of the multi-layered product disclosed by Takada

***Allowable Subject Matter***

Claims 7 and 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC S. ZIMMER whose telephone number is (571)272-1096. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 22, 2008

/Marc S. Zimmer/  
Primary Examiner, Art Unit 1796